

### **Remarks**

Claims 1-26 are pending with the subject Application for patent. With this paper, Applicants have amended Claims 1, 13, 16, 20, 21, 24, and 25, which are fully supported by the originally filed application, such as can be found at paragraphs [0047]-[0049], [0060], [0078], and [0083]-[0087]. Amendments to Claims 1, 13, 20, 21, 24, and 25 provide further descriptions of the claimed invention. The amendment to Claim 16 addresses a mere matter of form. No new matter has been introduced with the amendments set forth herein. Applicants respectfully request entry of each of the amended claims.

In paragraph 3, page 2 of the Office Action, Claim 16 was rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Applicants thank the Examiner for pointing out the lack of antecedent basis and have amended the claim accordingly.

In paragraph 2, page 3 of the Office Action, Claims 1, 13-14, and 25 was rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,838,998 (hereinafter "Matthews") in view of U.S. Patent No. 4,751,203 (hereinafter "Toussaint"). The Examiner initially states that Matthews does not disclose at least a portion of Applicants' claimed invention, such as an agglomerate precursor that has an alkali metal oxide content of less than about 10 wt. % based on the weight of the precursor. Applicants agree with the lack of teaching and hence inability of Matthews to teach or suggest each and every element of Applicants' claimed invention and its inability to teach or suggest Applicants' claimed invention on its whole. The Examiner then proposes that Toussaint teaches making microspheres with a glass former composition including an alkali metal oxide content of less than 10%. It is then said that because of the teachings of Toussaint, it would be obvious for Matthews to use a glass former composition of less than 10%. However, one must also look at each of the specific teachings of Matthews and of Toussaint in their entirety to determine obviousness. Taking a single element piecemeal from Toussaint and stating that it would have been obvious to include that single element in Matthews is not a showing of obviousness, unless it can be shown that the claimed invention on its whole

would have been obvious, which requires factual evidence, articulated reasoning with rational underpinnings. Applicants respectfully submit that the Examiner has at this point only provided a mere conclusory statement without a preponderance of factual evidence, which is required for a showing of obviousness.

Applicants submit that the method expressly taught by Toussaint and used to prepare one type of product (i.e., one having an alkali metal oxide content of less than 10%) is not the same as nor combinable readily with Matthews (which teaches a separate method of making and a separate type of final product). Thus, it is clear that there is no simple substitution of one element for another to obtain any type of predictable result. For example, it is pointed out that Matthews expressly teaches a method of mixing a high temperature glass former and a low temperature glass former in water to form a slurry for prilling; the composition of the mixture requires 20 wt.% soda oxide (e.g., Col. 2, ll. 22-28; Col. 6, ll. 52-56). In fact, it is noted that Matthews states clearly that the formula it chose had undergone modification (Col. 6, ll. 50-55) but that 20 wt.% soda oxide ended up being maintained, which means that this is an amount that is required in order to achieve the final product. Referring back to the prilled material of Matthews, Mathews teaches that when formed, it has an outer shell and in internal void (Col. 2, ll. 22-28). Such a material choice, structure and shape is expressly made by Matthews, which then requires Matthews' precursor material to undergo a very specific method of heating, steps that require previtrification (i.e., preheating with initial bloating) followed by high heating with further bloating in order to form its final product; the explanation of Matthews precise selection of glass materials and specific steps required to form the final product are clearly taught by Matthews at, for example, Col 10 and Col. 13, ll. 23-68.

The express teachings of Toussaint are contradictory to those of Matthews. For example, Toussaint expressly requires mixing glass former compositions in alcohol to form a gel or precipitate (Col. 6, ll. 34-49). A solvent gel or precipitate of Toussaint does not have an outer shell and an internal void as is required by Matthews. A solvent gel (which is viscous--a property of a fluid and not a solid) is also not considered an agglomerate or a solid agglomerate,

a solvent gel it is not readily dispersible in water. A precipitate is also not considered an agglomerate, a precipitate arises after settling out of a liquid and forms because bonds have been broken between particles. Furthermore, Toussaint expressly teaches away from previtrification by expressly stating that it does away with previtrification and emphasized that this is one of its purposes and is an advantage of its very method (Col. 5, ll. 20-29). In fact, Toussaint further teaches adding a devitrification agent to its glass former composition (Col. 6, ll. 20-33).

Applicants respectfully submit that based on the separate and contradictory teachings of Matthews and of Toussaint, there is no suggestion or motivation to combine these references. Certainly one of ordinary skill in the art having read each reference could not have combined readily the teachings because they are so contradictory. There is certainly no factual evidence or support based on the express teachings of the references that imply that a simple substitution of one component could be possible (or predictable) because neither of the references show or suggest that substitution of the one component would function. In fact, Matthews makes clear that various formulas for making a precursor were tried but that the desired result was achieved only when 20 wt.% soda oxide was used. It is further noted that a mere combining of elements is not sufficient to render a claim obvious if the results would not have been predictable to one of ordinary skill in the art and because Matthews and Toussaint each teach different methods, there is no obvious showing that such a combination is predictable. In addition, it cannot be ignored that Matthews expressly teaches that it requires 20 wt.% soda oxide to achieve its final product after having tried other formulas. Thus, from this it can be concluded that Matthews actually teaches away from the use of other amounts of soda oxide when making its final product.

In view of the preceding remarks, Applicants respectfully submit that the claims are not obvious over Matthews alone or in view of Toussaint, a reference that teaches a very different method and hence product from that taught by Matthews.

Applicants respectfully request all rejections under 35 U.S.C. 112, second paragraph, and 35 U.S.C. 103(a) be removed and the application be allowed to proceed to issuance.

### **Conclusion**

Applicants respectfully submit that the Application for patent is in condition for allowance. Applicants earnestly seek allowance of the claims, as provided in the Listing of Claims that begin on page 2 of this paper.

Should the Examiner have questions, comments, or suggestions in furtherance of the prosecution of this Application, please contact Applicants' representative at 214-999-4330. Applicants, through their representative, stand ready to conduct a telephone interview with the Examiner to review this Application if the Examiner believes that such an interview would assist in the advancement of this Application.

The appropriate fees for any extension of time are provided with this submission. To the extent that any further extension fees are required, the Commissioner is hereby authorized to charge payment of any additional fees to Deposit Account No. 07-0153 of Gardere Wynne Sewell LLP and reference Attorney Docket No. 129843-1102. Please credit any overpayments to this same Deposit Account.

This is intended to be a complete response to the Office Action mailed on March 9, 2010.

**Please direct all correspondence to the practitioner listed below at Customer No. 60148.**

Respectfully submitted,

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